REMARKS

Claims 1-16 are currently pending in the patent application. The Examiner has rejected the Claims 10 and 11 under 35 USC 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention; Claims 1, 2, 3, and 12-15 under 35 USC 102(e) as anticipated by the Endo patent; Claim 16 under 35 USC § 102(e) as being anticipated by the Dave patent; Claims 4 and 5 under 35 USC 103 as unpatentable over the teachings of Endo in view of Dong; Claims 6-8 under 35 USC 103 as unpatentable over the teachings of Endo in view of Dong and Leymann; and, Claims 9-11 under 35 USC 103 as being unpatentable over the teachings of Endo in view of Kraft. For the reasons set forth below, Applicants respectfully assert that all of the pending claims are definite and patentable over the cited prior art.

With regard to the rejections of Claims 10 and 11 as indefinite, Applicants have amended the language of each of the claims, as well as the language of Claim 9 which parallels that of Claim 10, to provide the appropriate

antecedent basis. Applicants respectfully submit that the claims, as amended, are definite.

Claims 1, 2, 3, and 12-15 have been rejected under 35 USC 102(e) as anticipated by the Endo patent. The Endo patent is directed to a workflow system for task allocation which looks at attribute data at the head (i.e., in the header) of a task which has been received and then assigns a numerical value to it (see: Col. 11, lines 38-51). The numerical value then functions as an indicator of priority for the task. The Endo patent does not analyze a process model, comprising one or more activities as nodes of an arbitrary graph and having directed edges of the graph defining the control flow within a process model, to determine if a priority execution indicator is assigned to one of the activities within the process model, as is explicitly called for in the language of Claims 1, 2, 3, 12, 13, 14 and 15. Endo's step of looking at attribute data in a packet/task header is not the same or suggestive of analyzing a process model to determine if a priority execution indicator is assigned to one of the activities within the process model.

For a patent to anticipate another invention under 35 USC § 102(e), the patent must clearly teach each and every claimed feature of the anticipated invention. Since the Endo patent clearly does not teach the analyzing of a process model as claimed, it cannot be maintained that the Endo patent anticipates each and every claim feature.

Claim 16 has been rejected under 35 USC § 102(e) as being anticipated by the Dave patent. The Dave patent teaches a hardware-software module co-synthesis algorithm for designing an architecture for an embedded system. The Dave system parses different task graphs and then allocates edges of the graphs to communication links based on a performance evaluation to determine a best architecture. The Dave patent does not start with a Workflow Management System (WFMS) which is a process model. Moreover, the Dave patent does not teach or suggest at least one processing component for analyzing a WFMS process model to determine if a priority execution indicator is assigned to an activity in the process model. Dave's teachings regarding priority, found at Col. 11, line 61 et seq, refer to sorting tasks in decreasing order of priority "at the beginning". Again, Dave is not teaching the analyzing of a process model for

priority information, but is obtaining priority information prior to creating a task graph. Finally, Dave does not teach an activity launching component for causing the WFMS process model to launch execution of an activity with an execution priority specified according to the priority execution indicator. Applicants also note that the Dave patent provides teachings at Col. 11, line 14 of reassigning priority levels. The reassigning steps of Dave teach away from the invention as claimed by the present application.

Applicants respectfully reiterate that for a patent to anticipate another invention under 35 USC § 102(e), the patent must clearly teach each and every claimed feature of the anticipated invention. Since the Dave patent clearly does not teach a WFMS as a process model and the additional analysis and launching components, it cannot be maintained that the Dave patent anticipates every claim feature.

Claims 4 and 5 have been rejected under 35 USC 103 as unpatentable over the teachings of Endo in view of Dong. The Endo patent has been discussed above and Applicants rely on those arguments without repeating same. The Examiner has stated that Dong discloses a workflow comprising a priority execution specification. Applicants respectfully disagree.

The Dong patent looks at task characteristics (e.g., "task unneeded" or "task necessary") or properties which will enhance overall performance, so that processing will not be held up unnecessarily pending execution of "necessary tasks". The Dong teachings do not, however, teach that the task characteristics are activity priority values nor do they obviate the additional level of priority specification which is taught by the present application.

In page 13, lines 15-23 and in page 14, lines 3-12, the present specification expressly teaches that multiple priority values can exist, for an activity, a performance sphere, and a process model. The priority value for an activity will take precedence over that of the activity's sphere; and, the priority value for a performance sphere will take precedence over that of the process model. Claims 4 and 5 recite determining if a priority execution specification is associated with the activity and assigning the priority execution indicator based on the activity's priority execution specification.

Applicants respectfully submit that the combination of Endo and Dong does not obviate the claim language. Endo, as discussed above, simply looks at attribute data for a task.

To modify Endo with Dong, one would simply insert the task characteristic into the attribute data for the task. In either instance, one would not arrive at a method wherein a process model is first analyzed for a priority execution indicator and further analyzed for a priority execution specification just for the activity. Absent some teachings of analysis of a process model, determining if one or more priority values exist, assigning the determined priority value to the activity, and launching execution of the activity according to the priority value, it cannot be maintained that the combination of Endo and Dong obviates the invention as set forth in the pending claims.

Claims 6-8 have been rejected under 35 USC 103 as unpatentable over the teachings of Endo in view of Dong and Leymann. The combination of Endo and Dong has been distinguished above. In addition, Applicants note that neither the Endo nor the Dong patent teaches a performance sphere, the assignment of a priority level for the performance sphere, or the use of that performance sphere's priority level as the priority level for an activity. The Examiner has cited the Leymann article for its discussion of spheres. The Leymann article describes two kinds of

"spheres" for use in characterizing and grouping tasks. The first, a compensation sphere, is a grouping of completed tasks which are grouped for purposes of compensation. The compensation sphere is not the same as nor suggestive of the performance sphere which is taught at pages 12 and 13 of the present specification. The second, an atomic sphere, is a grouping of tasks which necessarily all commit or all abort in accordance with known communications processing. Again, the atomic sphere is not the same as nor suggestive of a performance sphere which is taught by the present application. The compensation spheres and atomic spheres do not represent the grouping of tasks as set forth in the present specification and do not have (nor would they logically be modified to have) assigned priorities. Applicants respectfully assert that the common use of the term "sphere" does not obviate the claim language.

Claims 9-11 have been rejected under 35 USC 103 as being unpatentable over the teachings of Endo in view of Kraft. The distinctions over Endo recited above are relied upon herein. The Examiner has additionally cited the Kraft patent which teaches, in Columns 7-9, that an application may have a process-id of an X application but must move it
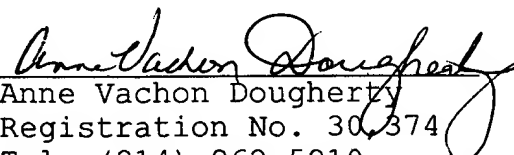
to another workspace for which it does not have a process-id. Under the Kraft teachings at Col. 9, lines 7-10, the application will be re-prioritized. Applicants respectfully assert that the Kraft teachings of re-prioritizing clearly do not obviate the invention as claimed. Claims 9-11 recite that the launching comprises mapping the priority execution indicator to a value based on either the execution environment (Claims 9 and 10) or the communication system (Claim 11). Mapping the priority execution indicator is not the same as Kraft reprioritizing due to the lack of an appropriate workspace process-id.

Based on the foregoing amendments and remarks, Applicants respectfully request withdrawal of the rejections and issuance of the claims.

Respectfully submitted,

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MARKED UP CLAIMS WITH AMENDMENTS SHOWN

9. A method of managing workload within a WFMS according to claim 1, wherein said <u>activity requires a specific execution-environment and wherein said</u> launching further comprises mapping said priority execution indicator to a value based on said activity's specific execution environment.

10. A method of managing workload within a WFMS according to claim 2, wherein said <u>activity requires a specific execution-environment and wherein said</u> launching further comprises mapping said priority execution indicator to a value in accordance to said WFMS's specific execution-environment.

11. A method of managing workload within a WFMS according to claim 3, wherein said <u>one or more messages are communicated along a communication-system and wherein said</u> launching further comprises mapping said priority execution indicator to a value in accordance to said communication-system.